

Listing of the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) A separation cartridge comprising:
a baffle filter; and
a packed bed of porous inorganic particles positioned adjacent to the baffle filter;
wherein the baffle filter and the packed bed are coupled together in the cartridge; and
wherein the cartridge is used to separate one or more entrained oleo substances from a gas stream in a kitchen hood system.
2. (Previously Presented) The separation cartridge of claim 1 wherein the particles comprise at least one of a ceramic material or a metal.
3. (Canceled)
4. (Previously Presented) The separation cartridge of claim 1 wherein the packed bed is pleated.
5. (Canceled)
6. (Currently Amended) The separation cartridge of claim 1 wherein ~~a majority of the particles~~ include particles that are approximately ~~0.1 millimeters~~ 0.25 millimeters to approximately ~~10 millimeters~~ 4 millimeters in size.
7. (Previously Presented) The separation cartridge of claim 1 wherein the particles are a plurality of sizes.
8. (Canceled)
9. (Previously Presented) The separation cartridge of claim 1 wherein the particles comprise an exterior surface and a plurality of channels that open onto the exterior surface and define internal surfaces.

10. (Currently Amended) The separation cartridge of claim 9 wherein the channels ~~comprise~~ have a mean size of approximately 0.01 microns to approximately 100 microns.
11. (Currently Amended) The separation cartridge of claim 9 wherein the ~~porous inorganic~~ particles are approximately 15% porous to approximately 70% porous.
- 12-15. (Canceled)
16. (Previously Presented) The separation cartridge of claim 1 wherein the baffle filter is in contact with the packed bed.
17. (Previously Presented) The separation cartridge of claim 1 wherein the cartridge is approximately 2.5 centimeters to approximately 6.4 centimeters wide.
18. (Currently Amended) The separation cartridge of ~~claim 17~~ claim 1 wherein the cartridge is approximately 3.8 centimeters to approximately 4.8 centimeters wide.
19. (Currently Amended) The separation cartridge of claim 1 wherein the kitchen hood system is used to vent the gas stream into the atmosphere.
20. (Currently Amended) The separation cartridge of claim 1 ~~further~~ comprising a frame which is used to hold the baffle filter and the packed bed together.
21. (Previously Presented) The separation cartridge of claim 20 wherein one or both of the baffle filter or the packed bed is configured to be easily removed from the frame.
22. (Previously Presented) The separation cartridge of claim 20 wherein the baffle filter, the packed bed, and the frame are fixedly coupled together.
23. (Previously Presented) The separation cartridge of claim 20 wherein the frame encloses the baffle filter and the packed bed.

24. (Currently Amended) The separation cartridge of claim 1 wherein the baffle filter is configured to be received by upper and lower railings in the kitchen hood system and the packed bed is configured to protrude outward from a plane defined by the upper and lower railings.

25. (Previously Presented) The separation cartridge of claim 24 wherein the cartridge is approximately 6.35 centimeters to approximately 19 centimeters wide.

26. (Previously Presented) The separation cartridge of claim 1 wherein a height of a first portion of a side of the cartridge is greater than a height of a second portion of the side of the cartridge, the first portion of the side corresponds to a portion of the cartridge that comprises the baffle filter and the second portion of the side corresponds to a portion of the cartridge that comprises the packed bed, the first portion of the side being configured to be received by upper and lower railings of a hood.

27-43. (Canceled)

44. (Currently Amended) A separation cartridge comprising:
a plurality of ~~adjacent~~ physically separate filters each of which includes a separation mediums including medium, wherein the plurality of filters are coupled together to form the cartridge, wherein at least one of the filters includes a packed bed of porous inorganic particles, and wherein the separation cartridge is used to separate an entrained oleo substance from a gas stream in a kitchen hood system.

45. (Currently Amended) The separation cartridge of claim 44 wherein the cartridge includes only two ~~separation mediums~~ filters.

46. (Currently Amended) The separation cartridge of claim 44 wherein at least one of the plurality of ~~separation mediums comprises~~ filters includes a baffle filter.

47-48. (Canceled)

49. (Previously Presented) The separation cartridge of claim 44 wherein the kitchen hood system is used to vent the gas stream into the atmosphere.

50-77. (Canceled)

78. (Currently Amended) A separation system comprising:
a kitchen hood including a first railing and a second railing, the first railing being positioned opposite the second railing; and
~~ductwork coupled to the hood;~~
~~a fan coupled to the ductwork, the fan being used to move air from the hood through the ductwork and into the atmosphere; and~~
~~a separation cartridge coupled to the hood and/or ductwork, the separation cartridge including:~~
a cartridge comprising a plurality of separation mediums including a bed of porous inorganic particles, the plurality of separation mediums being used to separate one or more entrained oleo substances from the air; and
~~a frame configured to hold the separation mediums~~
wherein the first railing and the second railing are used to hold the plurality of separation mediums.

79. (Canceled)

80. (Currently Amended) The separation system of claim 78 wherein the plurality of separation mediums include a baffle filter.

81-91. (Canceled)

92. (Currently Amended) A separation cartridge comprising:
a first means for separating an entrained oleo substance from a gas stream in a kitchen hood using a baffle filter;

a second means for separating an entrained oleo substance from a gas stream in a kitchen hood using a packed bed; and

a frame ~~configured~~ used to hold the first and second means together to form the cartridge;
wherein the cartridge is removable from the kitchen hood.

93. (Currently Amended) The separation cartridge of claim 44 wherein the plurality of ~~adjacent separation mediums~~ filters includes a mesh filter.

94. (Canceled)

95. (Previously Presented) The separation cartridge of claim 46 wherein the baffle filter is in contact with the packed bed.

96. (Currently Amended) The separation system of claim 78 comprising ductwork coupled to the kitchen hood, wherein a catalytic converter is positioned in the ductwork.

97. (Currently Amended) The separation system of claim 80 wherein the baffle filter is in contact with the ~~packed~~ bed of particles.

98. (Canceled)

99. (Currently Amended) A separation cartridge comprising:

a baffle filter; and

a bed of particles ~~positioned adjacent to the baffle filter~~ coupled together with the baffle filter to form the cartridge;

wherein the cartridge is used to separate one or more entrained oleo substances from a gas stream in a kitchen hood system.

100. (Currently Amended) The separation cartridge of claim 99 wherein the ~~particle~~ particles comprise at least one of a ceramic material or a metal.

101. (Currently Amended) The separation cartridge of claim 99 wherein the bed of particles is pleated.

102. (Currently Amended) The separation cartridge of claim 99 wherein the particles ~~are~~ include porous inorganic particles.

103. (Previously Presented) The separation cartridge of claim 99 wherein the particles are solid.

104. (Currently Amended) The separation cartridge of claim 99 wherein the baffle filter is in contact with the ~~packed~~ bed of particles.

105. (Previously Presented) The separation cartridge of claim 99 wherein the cartridge is approximately 2.5 centimeters to approximately 6.4 centimeters wide.

106. (Currently Amended) The separation cartridge of claim 99 wherein the kitchen hood system is used to vent the gas stream into the atmosphere.

107. (New) The separation cartridge of claim 99 wherein the bed of particles is at least substantially flat.

108. (New) The separation cartridge of claim 99 wherein the particles absorb the oleo substance.

109. (New) The separation cartridge of claim 99 wherein the cartridge is configured to be mounted between opposing U-shaped railings in the kitchen hood which are approximately 1.3 centimeters to approximately 7.6 centimeters wide.

110. (New) The separation cartridge of claim 99 wherein the particles include particles that are approximately 0.25 millimeters to approximately 4 millimeters in size.

111. (New) The separation cartridge of claim 1 wherein the packed bed is at least substantially flat.

112. (New) The separation cartridge of claim 44 wherein the packed bed is at least substantially flat.
113. (New) The separation cartridge of claim 44 wherein the packed bed is pleated.
114. (New) The separation cartridge of claim 44 wherein the particles comprise at least one of a ceramic material or a metal.
115. (New) The separation cartridge of claim 44 wherein the particles absorb the oleo substance.
116. (New) The separation cartridge of claim 44 wherein the cartridge is configured to be mounted between opposing, U-shaped railings in the kitchen hood which are each approximately 1.3 centimeters to approximately 7.6 centimeters wide.
117. (New) The separation cartridge of claim 44 wherein at least one of the plurality of filters is configured to be easily removed from the cartridge.
118. (New) The separation cartridge of claim 44 wherein the plurality of filters includes a plurality of perforated plates which are spaced apart from each other.
119. (New) The separation cartridge of claim 44 wherein the particles include porous inorganic particles.
120. (New) The separation cartridge of claim 44 wherein the particles include particles that are approximately 0.25 millimeters to approximately 4 millimeters in size.
121. (New) The separation system of claim 78 wherein the first railing and the second railing are each substantially U-shaped and approximately 1.3 centimeters to approximately 7.6 centimeters wide.

122. (New) The separation system of claim 78 wherein the first railing and the second railing are each substantially U-shaped and approximately 3.5 centimeters to approximately 5.1 centimeters wide.
123. (New) The separation system of claim 78 wherein the first railing and the second railing have a substantially U-shaped cross section.
124. (New) The separation system of claim 78 wherein the bed of particles is at least substantially flat.
125. (New) The separation system of claim 78 wherein the bed of particles is pleated.
126. (New) The separation system of claim 78 wherein the particles comprise at least one of a ceramic material or a metal.
127. (New) The separation system of claim 78 wherein the particles absorb the oleo substance.
128. (New) The separation system of claim 78 wherein the cartridge includes a frame that is used to hold the plurality of separation mediums.
129. (New) The separation system of claim 78 wherein the plurality of separation mediums includes a plurality of perforated plates which are spaced apart from each other.
130. (New) The separation system of claim 78 wherein the particles include porous inorganic particles.
131. (New) The separation system of claim 78 wherein the particles include particles that are approximately 0.25 millimeters to approximately 4 millimeters in size.
132. (New) A system comprising:
a kitchen hood; and
a cartridge that includes a bed of particles and one or more additional filters;

wherein the cartridge is positioned in the kitchen hood to separate an oleo substance from a gas stream which passes through the kitchen hood.

- 133. (New) The system of claim 132 wherein the bed of particles is removable from the cartridge.
- 134. (New) The system of claim 132 wherein the one or more additional filters include a baffle filter.
- 135. (New) The system of claim 132 wherein the bed of particles is at least substantially flat.
- 136. (New) The system of claim 132 wherein the bed of particles is pleated.
- 137. (New) The system of claim 132 wherein the particles comprise at least one of a ceramic material or a metal.
- 138. (New) The system of claim 132 wherein the kitchen hood includes a first railing and a second railing positioned opposite the first railing, wherein the first railing and the second railing are substantially U-shaped, and wherein the first railing and the second railing are used to support the cartridge.
- 139. (New) The system of claim 138 wherein the first and second railings are each approximately 3.5 centimeters to approximately 5.1 centimeters wide.
- 140. (New) The system of claim 132 wherein the one or more additional filters and the bed of particles are in contact with each other in the cartridge.
- 141. (New) The system of claim 132 wherein the particles include porous inorganic particles.
- 142. (New) The system of claim 132 wherein the particles include particles that are approximately 0.25 millimeters to approximately 4 millimeters in size.

143. (New) A system comprising:
a kitchen hood including a railing having a substantially U-shaped cross section;
a baffle filter; and
a bed of particles which is used to separate one or more entrained oleo substances from a gas stream which passes through the kitchen hood;
wherein the railing is used to support the baffle filter and the bed of particles in the kitchen hood.
144. (New) The system of claim 143 wherein the bed of particles is at least substantially flat.
145. (New) The system of claim 143 wherein the particles comprise at least one of a ceramic material or a metal.
146. (New) The system of claim 143 wherein the particles absorb the oleo substance.
147. (New) The system of claim 143 wherein the baffle filter is in contact with the bed of particles.
148. (New) The system of claim 143 wherein the kitchen hood is used to vent the gas stream into the atmosphere.
149. (New) The system of claim 143 wherein the particles include porous inorganic particles.
150. (New) The system of claim 143 wherein the baffle filter and the bed of particles are included in a cartridge that is supported by the railing.
151. (New) The system of claim 150 wherein one or both of the baffle filter and the bed of particles is configured to be easily removed from the cartridge.
152. (New) The system of claim 143 wherein the particles include particles that are approximately 0.25 millimeters to approximately 4 millimeters in size.

153. (New) The system of claim 143 wherein the railing is a first railing and the kitchen hood includes a second railing positioned opposite the first railing, and wherein the first railing and the second railing are used to hold the baffle filter and the bed of particles in the kitchen hood.

154. (New) A separation cartridge comprising:
a baffle filter; and
a bed of particles;
wherein the cartridge is used to separate one or more entrained oleo substances from a gas stream in a kitchen hood; and
wherein no additional filters are positioned between the baffle filter and the bed of particles in the cartridge.

155. (New) The separation cartridge of claim 154 wherein the particles comprise at least one of a ceramic material or a metal.

156. (New) The separation cartridge of claim 154 wherein the bed of particles is pleated.

157. (New) The separation cartridge of claim 154 wherein the particles include porous inorganic particles.

158. (New) The separation cartridge of claim 154 wherein the particles are solid.

159. (New) The separation cartridge of claim 154 wherein the baffle filter is in contact with the bed of particles.

160. (New) The separation cartridge of claim 154 wherein the cartridge is approximately 2.5 centimeters to approximately 6.4 centimeters wide.

161. (New) The separation cartridge of claim 154 wherein the kitchen hood is used to vent the gas stream into the atmosphere.

162. (New) The separation cartridge of claim 154 wherein the bed of particles is at least substantially flat.

163. (New) The separation cartridge of claim 154 wherein the particles absorb the oleo substance.

164. (New) The separation cartridge of claim 154 wherein the cartridge is configured to be mounted between opposing U-shaped railings in the kitchen hood which are approximately 1.3 centimeters to approximately 7.6 centimeters wide.

165. (New) The separation cartridge of claim 154 wherein the particles include particles that are approximately 0.25 millimeters to approximately 4 millimeters in size.